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AUTHOR Kerka, Sandra
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ABSTRACT

To dispel concerns that career education does not belong in middle school, it may help to reinterpret a career more broadly as life, not just work. Middle school students should view career paths as a broad range of options available to them. In addition, early career education may help to dispel sex-role stereotypes and self-limiting practices of minority group children, as well as increase their awareness of how schoolwork relates to work. Infusion of career education into the middle school curriculum is ideal. Infusion practices may include an introductory career orientation course, integration of career exploration topics in subject classes, a thematic interdisciplinary curriculum, and career portfolios. Other best practices include constructivism, in which learners undertake inquiry and actively construct knowledge by integrating new information into their existing cognitive structure; mentoring; service learning; contextualized learning; use of technology; and use of other resources, such as career-oriented interdisciplinary summer school, speakers bureau, field trips to high schools, colleges, and businesses, career days, and job shadowing. (Contains 17 references.) (KC)

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Sandra Kerka

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ERIC Clearinghouse on Adult, Career, and Vocational Education
Center on Education and Training for Employment
College of Education
The Ohio State University
1900 Kenny Road
Columbus, OH 43210-1090

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ERIC Clearinghouse on Adult, Career, and Vocational Education

by Sandra Kerka

PRACTICE APPLICATION 2000
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Middle School Career Education and Development

Students of middle school age are coping with the challenges of cognitive, physiological, and psychological development associated with puberty (Cohen et al. 1996). That's plenty for early adolescents to handle, according to some. Others argue that career development is an ongoing, lifelong process (O'Brien et al. 1999), and its challenges must be addressed beginning in elementary and middle school. As the threshold between elementary and high school, between childhood and adulthood, middle school provides a significant opportunity for the development of knowledge, skills, attitudes, and awareness that are the foundation for the next stage of life. This Brief examines what elements of career education and development are appropriate in middle school and describes best practices for working with early adolescents.

The Need for Middle School Career Education

One concern about whether career education and development are appropriate in middle school is the possibility of tracking or forcing children into a career path too early (Finch and Mooney 1997). Some people view it as an add-on to an already encumbered curriculum (ibid.). Others see an incompatibility between the philosophy of middle schools and that of career education initiatives such as school-to-work (ibid.). However, studies of adolescents have uncovered a number of reasons that justify the inclusion of career education at this level:

- Sex-role stereotypes, particularly about gender-appropriate occupations, are formed early (Guss and Adams 1998).
- Students at risk, girls, and minority group children often limit their career choices early (O'Brien et al. 1999).
- Few middle schoolers have realistic career plans, and many lack awareness of the world of work (Finch and Mooney 1997).

Interviews with sixth and ninth graders (Johnson 2000) showed that most had only a shallow understanding of how school relates to work, had limited awareness of the knowledge and skills needed for work and little sense of how to develop them, had little or no awareness of the type of work involved in their career aspiration, and believed that schoolwork needs to be career specific to be relevant.

Thus, at the middle school level, career education is needed to lay the groundwork for future career development by helping students achieve the following goals ("Developmental Career Programs" 1998): knowledge of personal characteristics, interests, aptitudes, and skills; awareness of and respect for the diversity of the world of work; understanding of the relationship between school performance and future choices; and development of a positive attitude toward work.

These goals are compatible with the developmental needs of 11-14 year-olds: academic and social skill development, identity formation, development of a future orientation, and testing of adult roles, including work roles (ibid.). At this level, students should continue the self- and career awareness ideally begun in elementary school and begin orientation and exploration activities regarding careers. They should make *tentative* choices related to their interests and investigate them thoroughly in preparation for high school courses that will direct them on a career path ("Developmental Career Programs" 1998).

"Too frequently, career preparation for middle grade students consists of a single, brief unit once a year" ("Developmental Career Programs" 1998, n.p.). Ideally, career education and development should be infused into the curriculum. Maddy-Bernstein and Dare (1997) found that the most effective career development programs are systemic–developmental, accessible to all learners, and embedded in the curriculum "as part of the whole process of educating a child for the larger thing called life" (p. 2).

Infusion practices may include an introductory career orientation course, integration of career exploration topics in subject classes, a thematic interdisciplinary curriculum, and career portfolios ("Developmental Career Programs" 1998; Finch and Mooney 1997). Portfolios can be used throughout the middle school years to document self-knowledge acquired through appropriate assessment tools such as interest inventories and participation in such activities as job shadowing and career day; and results of computer and real-world information gathering about occupations.

Best Practices for Middle School Career Education

An infused curriculum uses career information and self-knowledge to help students draw connections between school and life. Some of the best practices in middle school career education align with the growing body of research demonstrating the value of the following approaches that enhance relevance, student motivation, and effective transfer of learning: integrated curriculum (Finch and Mooney 1997); constructivism (Kerka 1997); mentoring (Cohen et al. 1996; Dare and Maddy-Bernstein 1999); service learning (Finch and Mooney 1997); and contextualized learning ("Developmental Career Programs" 1998; Finch and Mooney 1997). Examples of these five approaches in career development are provided next, as well as a sixth approach–technology, which is a sure-fire way to attract and maintain middle schoolers' interest.

Integrated Curriculum. In a middle school language arts class (Jacobs, Beane, and Malone 1996), students compiled peer group expressions/slang and media examples of them, spent time free writing about them, held small-group discussions of language patterns, and interviewed adults about language and communication on the job. They examined a newspaper for technical language and developed an occupational information center with student-gathered resources. Using these resources for a research project, they investigated the power of language in a selected profession, learning how language use develops career awareness. Both language arts and career education goals were met as students developed a sense of individual uniqueness and their own patterns of usage, connected distinctive language with professions, and in the process learned how to research occupational information.

Constructivism. A constructivist approach in which learners undertake inquiry and actively construct knowledge by integrating new information into their existing cognitive structure is exemplified in a 2-week summer program designed to promoted interest in science careers among middle school students (Gibson 1998). Inquiry-based science activities involved students in seeking answers to their own questions using science processes and critical thinking. The approach helped students with high science interest maintain their interest in high school; in addition, active, engaged teaching methods heavily influenced interest and achievement, whereas notetaking and memorization decreased interest.

Mentoring. The influence of a caring adult other than a parent can play a crucial role in adolescents' development. For females struggling with women's conflicting roles in society, "nothing is more important to girls' developing sense of self than a mentor" (Cohen et al. 1996, p. 86). Gonzalez et al. (2000) describe an allied health middle school mentoring program that had the following goals: broadening knowledge of allied health careers, fostering development of appropriate attitudes, and expanding knowledge of required job skills. Activities included a speakers bureau, service learning, career day, interdisciplinary presentations on how team of professionals works on a case, and job shadowing. Not only did mentoring help with career choice, but the presence of a committed, caring adult helped in other ways.

Service Learning. Community service activities can have several benefits: developing students' self-esteem and sense of civic responsibility and encouraging volunteerism while exploring the reality of jobs (Finch and Mooney 1997). Ohio's Individual Career Planning Program (Benz 1996) includes a community service component (as well as integrated academics, mentoring, and portfolios). Most of the eighth-graders who participated in the 9-week program showed an increase in career maturity, especially in terms of their post-high school future plans and knowledge of the best ways to prepare for future careers.

Contextualized Learning. Hands-on, real-world experiences help students apply the information and skills acquired in the classroom in actual settings. In the Math Options Summer Institute (Van Leuvan 1997), designed to expose girls to the health professions, students participated in math simulation activities during tours of hospital units. Learning to take pulses and calculate base, exercise, and resting heart rates allowed students to experience math as it is used in the workplace. Another school (Yatvin 1995) provides actual in-school jobs for middle schoolers, who participate in real-world personnel processes: applications, references, interviews, time sheets, and evaluations. Adult supervisors emphasize math, writing, reading, and problem solving on the job.

Technology. Enviro Quest® and ROC-CD® are two CD-ROM multimedia instructional programs intended to motivate middle school students to explore environmental careers. More than 95% of the 650 middle school students who tested them enjoyed using them; interest in environmental careers increased from 40% to 70% (Mauldin 1996; <www.gradstudies.musc.edu/CD/EQ-ROC.html>. Computer-assisted career guidance systems (CAGCS) can also increase the career maturity of middle school students (Luzzo and Pierce 1996). Research showed that a middle school student's attitudes toward the career decision-making process may become more age appropriate (i.e., more mature) after using DISCOVER. CACGS thus can increase a student's readiness to make realistic educational and vocational decisions.

Other Resources. Dare and Maddy-Bernstein (1999) identify the National Career Development Guidelines' middle school competencies for self-knowledge, exploration, and career planning addressed by school- and work-based activities. They describe appropriate middle school school-based activities including career-oriented interdisciplinary summer school, speakers bureau, high school and college field trips, career days, portfolios, school-based mentoring, and tech prep introduction. Work-based activities described include business field trips and job shadowing.

Conclusion

To dispel concerns that career education does not belong in middle school, it may help to reinterpret career more broadly as life, not just work (Finch and Mooney 1997). Middle school students should view career paths as a broad range of options available to them (Maddy-Bernstein and Dare 1997). It is not too soon for early adolescents to question assumptions about work: Should work enhance life? How? Byars (1996) urges teachers, parents, and others to avoid communicating only that a good education equals a good lifestyle. In middle schools, as well as at all levels, career education should involve more than job skills and career awareness.

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The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210